

23. (New) The sealant for a liquid crystal display cell as described in claim 22, wherein the moisture permeability in passing through a cured film having a thickness of 100 μm at 80°C is 200 g/m²·24 hours or less.

24. (New) The sealant for a liquid crystal display cell as described in claim 22, wherein when the sealant is brought into contact with a liquid crystal at 145°C for one hour in a proportion of one mass part of the liquid crystal to 0.1 mass part of the sealant, the liquid crystal has a specific resistance value which is 250 times or less as large as a specific resistance value of the liquid crystal before brought into contact with the sealant.

25. (New) The sealant for a liquid crystal display cell as described in claim 22, wherein the cured composition comprises an epoxy resin cured with a curing agent comprising at least one selected from polyphenol compounds, polyphenol resins and esterified products thereof.

26. (New) The sealant for a liquid crystal display cell as described in claim 25, wherein the composition further comprises a curing accelerator comprising at least one selected from alkylurea derivatives and phosphazene compounds.

27. (New) A composition for a liquid crystal display cell sealant comprising an epoxy resin (1), a curing agent (2) comprising at least one selected from polyphenol

compounds, polyphenol resins and esterified products thereof and a curing accelerator (3) comprising at least one selected from alkylurea derivatives and phosphazene compounds.

28. (New) The composition for a liquid crystal display cell sealant as described in claim 27, comprising 20 to 88.9 mass parts of the epoxy resin (1), 10 to 50 mass parts of the curing agent (2) comprising at least one selected from polyphenol compounds, polyphenol resins and esterified products thereof and 0.1 to 20 mass parts of the curing accelerator (3) comprising at least one selected from alkylurea derivatives and phosphazene compounds.

29. (New) The composition for a liquid crystal display cell sealant as described in claim 27, wherein an aqueous solution obtained by admixing the composition with the same mass of purified water as that of the composition has an ionic conductivity of 1 mS/m or less.

30. (New) The composition for a liquid crystal display cell sealant as described in claim 27, wherein the cured composition has a water absorption coefficient of 2 mass % or less.

31. (New) The composition for a liquid crystal display cell sealant as described in claim 27, wherein a cured film of the composition having a thickness of 100 μm has a moisture permeability at 80°C of 200 g/m²·24 hours or less.

32. (New) The composition for a liquid crystal display cell sealant as described in claim 27, wherein when the sealant is brought into contact with a liquid crystal at 145°C for one hour in a proportion of one mass part of the liquid crystal to 0.1 mass part of the sealant, the liquid crystal has a specific resistance value which is 250 times or less as large as a specific resistance value of the liquid crystal before brought into contact with the sealant.

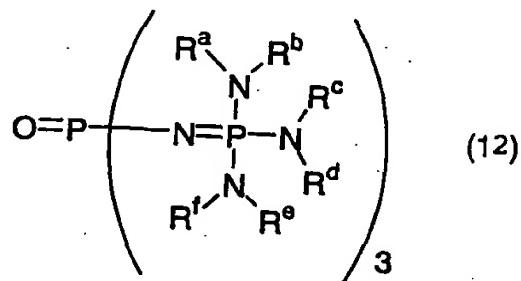
33. (New) The composition for a liquid crystal display cell sealant as described in claim 27, further comprising a rubber-like polymer fine particle which has a softening point of 0°C or lower and in which primary particles thereof have an average particle diameter of 5 μm or less in a proportion of 1 to 25 mass % based on the composition for a liquid crystal display cell sealant.

34. (New) The composition for a liquid crystal display cell sealant as described in claim 27, wherein the curing agent is at least one selected from phenol novolak resins, phenol aralkyl resins, naphthol novolak resins, naphthol aralkyl resins, alicyclic compound-modified phenol novolak resins, alicyclic compound-modified naphthol novolak resins, polycyclic aromatic compound-modified novolak resins, polyphenol monomers, polyvinylphenols, vinylphenol copolymers, polyisopropenylphenols, polyisopropenylphenol copolymers, esterified phenol novolak resins, esterified phenol aralkyl resins, esterified naphthol novolak resins, esterified naphthol aralkyl resins, esterified alicyclic compound-modified phenol novolak resins, esterified alicyclic compound-modified naphthol novolak

resins, esterified polycyclic aromatic compound-modified novolak resins, esterified polyphenol monomers, esterified polyvinylphenols, esterified vinylphenol copolymers, esterified polyisopropenylphenols and esterified polyisopropenylphenol copolymers.

35. (New) The composition for a liquid crystal display cell sealant as described in claim 27, wherein the alkylurea derivative is at least one selected from 3-(*p*-chlorophenyl)-1,1-dimethylurea, 3-(*o,p*-dichlorophenyl)-1,1-dimethylurea, 2,4-[bis(1,1-dimethylurea)]toluene and 2,6-[bis(1,1-dimethylurea)]toluene.

36. (New) The composition for a liquid crystal display cell sealant as described in claim 27, wherein the phosphazene compound is at least one compound represented by Formula (12):



wherein R^a to R^f each represent a hydrogen atom, a linear, branched or cyclic alkyl group having 1 to 10 carbon atoms or an aryl or aralkyl group having 6 to 10 carbon atoms, each are the same or different.

37. (New) A composition for a liquid crystal display cell sealant further comprising 1 to 15 mass parts of a conductive bead based on 100 mass parts of the composition as described in claim 27.

38. (New) A liquid crystal display element prepared by using the sealant for a liquid crystal display cell as described in claim 22.

39. (New) A liquid crystal display element prepared by using the sealant for a liquid crystal display cell as described in claim 23.

40. (New) A liquid crystal display element prepared by using the sealant for a liquid crystal display cell as described in claim 24.

41. (New) A liquid crystal display element prepared by using the sealant for a liquid crystal display cell as described in claim 25.

42. (New) A liquid crystal display element prepared by using the sealant for a liquid crystal display cell as described in claim 26.

43. (New) A liquid crystal display element obtained by using the composition for a liquid crystal display cell sealant as described in claim 27.

44. (New) A liquid crystal display element obtained by using the composition for a liquid crystal display cell sealant as described in claim 28.

45. (New) A liquid crystal display element obtained by using the composition for a liquid crystal display cell sealant as described in claim 29.

46. (New) A liquid crystal display element obtained by using the composition for a liquid crystal display cell sealant as described in claim 30.

47. (New) A liquid crystal display element obtained by using the composition for a liquid crystal display cell sealant as described in claim 31.

48. (New) A liquid crystal display element obtained by using the composition for a liquid crystal display cell sealant as described in claim 32.

49. A liquid crystal display element obtained by using the composition for a liquid crystal display cell sealant as described in claim 33.

50. (New) A liquid crystal display element obtained by using the composition for a liquid crystal display cell sealant as described in claim 34.

51. (New) A liquid crystal display element obtained by using the composition for a liquid crystal display cell sealant as described in claim 35.

52. (New) A liquid crystal display element obtained by using the composition for a liquid crystal display cell sealant as described in claim 36.

53. (New) A liquid crystal display element obtained by using the composition for a liquid crystal display cell sealant as described in claim 37.

54. (New) A production process for a liquid crystal display element comprising any of TN liquid crystal, STN liquid crystal, ferrodielectric liquid crystal and anti-ferrodielectric liquid crystal, comprising the steps of:

printing or dispenser-coating the composition for a liquid crystal display cell sealant as described in claim 28 on a bonding and sealing part of a glass-made or plastic-made substrate for a liquid crystal cell and precuring it at a temperature of 50 to 120°C,
then adjusting the position and superposing the other paired substrate thereon to temporarily fix them,

subjecting the paired substrates to hot cramping treatment at 80 to 200°C to bond and fix the above paired substrates in a homogeneous thickness falling in a range of 1 to 7 μm to form a liquid crystal display cell, and

then charging a liquid crystal material into the above cell and sealing the injection port with a photocuring type liquid crystal sealant composition or a two-liquid type liquid crystal sealant composition.

55. (New) A production process for a liquid crystal display element comprising any of TN liquid crystal, STN liquid crystal, ferrodielectric liquid crystal and anti-ferrodielectric liquid crystal, comprising the steps of:

printing or dispenser-coating the composition for a liquid crystal display cell sealant as described in claim 33 on a bonding and sealing part of a glass-made or plastic-made substrate for a liquid crystal cell and precuring it at a temperature of 50 to 120°C,

then adjusting the position and superposing the other paired substrate thereon to temporarily fix them,

subjecting the paired substrates to hot cramping treatment at 80 to 200°C to bond and fix the above paired substrates in a homogeneous thickness falling in a range of 1 to 7 μm to form a liquid crystal display cell, and

then charging a liquid crystal material into the above cell and sealing the injection port with a photocuring type liquid crystal sealant composition or a two-liquid type liquid crystal sealant composition.

56. (New) A production process for a liquid crystal display element comprising any of TN liquid crystal, STN liquid crystal, ferrodielectric liquid crystal and anti-ferrodielectric liquid crystal, comprising the steps of:

printing or dispenser-coating the composition for a liquid crystal display cell sealant as described in claim 34 on a bonding and sealing part of a glass-made or plastic-made substrate for a liquid crystal cell and precuring it at a temperature of 50 to 120°C,

then adjusting the position and superposing the other paired substrate thereon to temporarily fix them,

subjecting the paired substrates to hot cramping treatment at 80 to 200°C to bond and fix the above paired substrates in a homogeneous thickness falling in a range of 1 to 7 μm to form a liquid crystal display cell, and

then charging a liquid crystal material into the above cell and sealing the injection port with a photocuring type liquid crystal sealant composition or a two-liquid type liquid crystal sealant composition.

57. (New) A production process for a liquid crystal display element comprising any of TN liquid crystal, STN liquid crystal, ferrodielectric liquid crystal and anti-ferrodielectric liquid crystal, comprising the steps of:

printing or dispenser-coating the composition for a liquid crystal display cell sealant as described in claim 37 on a bonding and sealing part of a glass-made or plastic-made substrate for a liquid crystal cell and precuring it at a temperature of 50 to 120°C,

then adjusting the position and superposing the other paired substrate thereon to temporarily fix them,

subjecting the paired substrates to hot cramping treatment at 80 to 200°C to bond and fix the above paired substrates in a homogeneous thickness falling in a range of 1 to 7 μm to form a liquid crystal display cell, and

then charging a liquid crystal material into the above cell and sealing the injection port with a photocuring type liquid crystal sealant composition or a two-liquid type liquid crystal sealant composition.

58. (New) A production process for a liquid crystal display element comprising any of TN liquid crystal, STN liquid crystal, ferrodielectric liquid crystal and anti-ferrodielectric liquid crystal, comprising the steps of:

printing or dispenser-coating the composition for a liquid crystal display cell sealant as described in claim 28 on a bonding and sealing part of a glass-made or plastic-made substrate for a liquid crystal cell and precuring it at a temperature of 50 to 120°C,

then putting dropwise the liquid crystal thereon and superposing the other paired substrate thereon so that air is not shut therein and adjusting the position to temporarily fix them,

subjecting the paired substrates to hot cramping treatment at 80 to 150°C to bond and fix the above paired substrates in a homogeneous thickness falling in a range of 1 to 7 μm , and

then sealing the respiratory port with a photocuring type liquid crystal sealant composition or a two-liquid type liquid crystal sealant composition.

59. (New) A production process for a liquid crystal display element comprising any of TN liquid crystal, STN liquid crystal, ferrodielectric liquid crystal and anti-ferrodielectric liquid crystal, comprising the steps of:

printing or dispenser-coating the composition for a liquid crystal display cell sealant as described in claim 29 on a bonding and sealing part of a glass-made or plastic-made substrate for a liquid crystal cell and precuring it at a temperature of 50 to 120°C,

then putting dropwise the liquid crystal thereon and superposing the other paired substrate thereon so that air is not shut therein and adjusting the position to temporarily fix them,

subjecting the paired substrates to hot cramping treatment at 80 to 150°C to bond and fix the above paired substrates in a homogeneous thickness falling in a range of 1 to 7 μm , and

then sealing the respiratory port with a photocuring type liquid crystal sealant composition or a two-liquid type liquid crystal sealant composition.

60. (New) A production process for a liquid crystal display element comprising any of TN liquid crystal, STN liquid crystal, ferrodielectric liquid crystal and anti-ferrodielectric liquid crystal, comprising the steps of:

printing or dispenser-coating the composition for a liquid crystal display cell sealant as described in claim 34 on a bonding and sealing part of a glass-made or plastic-made substrate for a liquid crystal cell and precuring it at a temperature of 50 to 120°C,

then putting dropwise the liquid crystal thereon and superposing the other paired substrate thereon so that air is not shut therein and adjusting the position to temporarily fix them,

subjecting the paired substrates to hot cramping treatment at 80 to 150°C to bond and fix the above paired substrates in a homogeneous thickness falling in a range of 1 to 7 μm , and

then sealing the respiratory port with a photocuring type liquid crystal sealant composition or a two-liquid type liquid crystal sealant composition.

61. (New) A liquid crystal display element obtained by the production process for a liquid crystal display element as described in claim 33.

62. (New) A liquid crystal display element obtained by the production process for a liquid crystal display element as described in claim 55.

63. (New) A liquid crystal display element obtained by the production process for a liquid crystal display element as described in claim 56.

64. (New) A liquid crystal display element obtained by the production process for a liquid crystal display element as described in claim 57.

65. (New) A liquid crystal display element obtained by the production process
for a liquid crystal display element as described in claim 58.

66. (New) A liquid crystal display element obtained by the production process
for a liquid crystal display element as described in claim 59.

67. (New) A liquid crystal display element obtained by the production process
for a liquid crystal display element as described in claim 60.